Jeffrey Reservoir 2009 Survey Summary



Nebraska Game and Parks Commission

Jared Lorensen, Fisheries Biologist

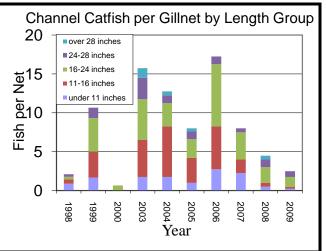
The following text and graphs are the result of standard fisheries surveys conducted during 2009 and depict the number of fish sampled per net and the relative abundance of fish within several length categories. For comparative purposes, results from previous years are also shown. Fish populations are sampled each fall at Jeffrey using gill nets, a method commonly used to sample fish found primarily in open water, such as walleye and white bass. These nets are set on approximately the same date and location each year to reduce variability and allow for trend comparisons of species abundance and size distributions.

As a whole, the Jeffrey Reservoir fishery is stable. Channel catfish numbers were low again in 2009. The catch rates observed in 2008 and 2009 may be unrepresentative of the actual population because water temperatures were lower than usual during sampling. Walleye numbers remained similar to those observed in 2008, but in 2009 larger individuals and a larger proportion greater than 15 inches were sampled. White bass numbers seem to be decreasing slightly, but have been exceptionally high since 2005. Wiper numbers in 2009 remained stable. Of the wipers sampled, 75% were greater than 15 inches with a few over 20 inches.

To create a unique fishery 25,000 fingerling sauger were stocked in 2009. In 2010, 550,000 sauger fry will be stocked. Sauger are very similar to walleye and also provide fantastic table fare; however they are better-adapted to flowing, turbid waters. Sauger can be identified by their compressed shape and the presence of spots on the spiny dorsal fin. Sauger are generally smaller than walleye but should provide another angling opportunity especially for canal anglers. These fish will not likely be available for harvest in 2010. White crappie were not sampled in 2009, but they provide additional angling opportunity at Jeffrey. Approximately 9,000 white crappie fingerlings will be stocked in 2010 to supplement the existing population.

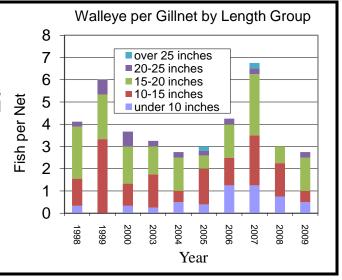
Channel Catfish

Channel catfish numbers continued to decline but their numbers have fluctuated historically. The size structure of fish caught in 2009 was dominated by individuals greater than 16 inches. Water temperatures during Jeffrey's 2008 and 2009 surveys were lower than average, and this may have influenced the number of channel catfish sampled. If channel catfish numbers continue to decline, supplemental stocking may be necessary.



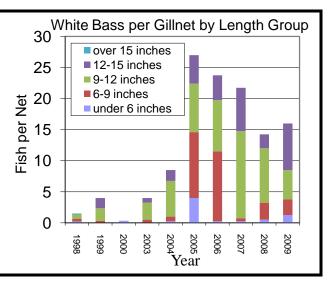
Walleye

Walleye numbers at Jeffrey are consistently low (about 3 fish per net) when compared to other lakes in the area. Walleye angling should be comparable to past years. Although catch rates were low, some larger individuals were sampled and a large proportion were in the 15-20 inch length range.



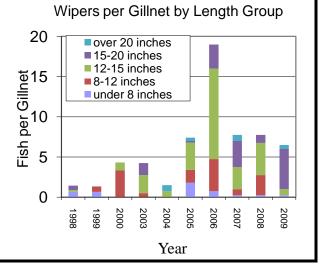
White Bass

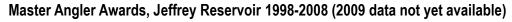
Catch rates have been high but declining since 2005. The 2009 catch rates showed an increase, however. An average of 16 fish were captured per gill net and just less than half were over 12 inches. The average length was 10.7 inches. These fish should provide great angling and perfect table fair during 2010.

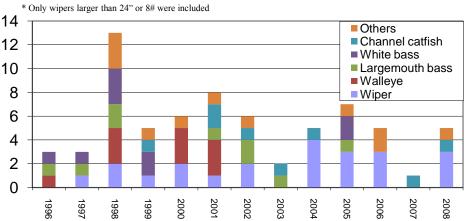


Wipers

Catch rates have been stable at Jeffrey for the last three years even though the number of fish sampled is relatively low. Most fish caught in 2009 were greater than 15 inches long. This population is managed to provide an opportunity to catch larger temperate bass. Therefore stocking numbers have been decreased to lessen competition between wipers and white bass. This should benefit the white bass population while still providing big wipers. Approximately 6,300 wiper fingerlings will be stocked in 2010.

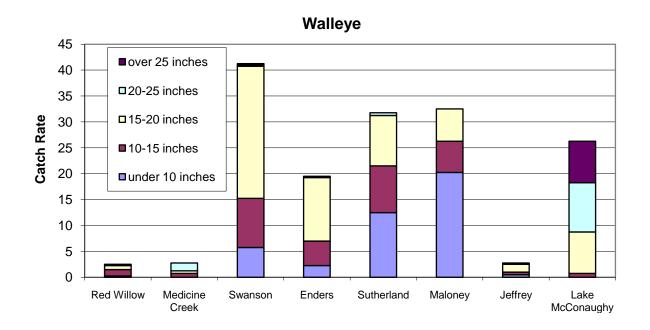


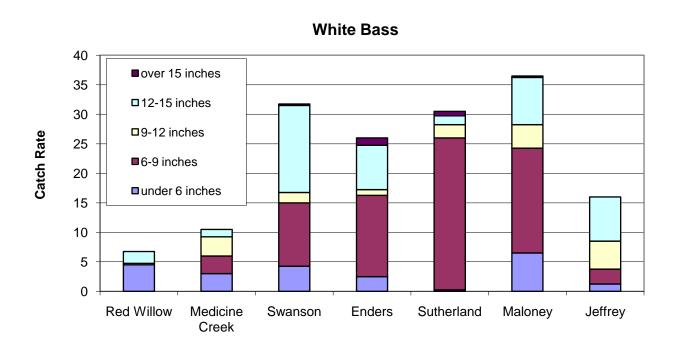




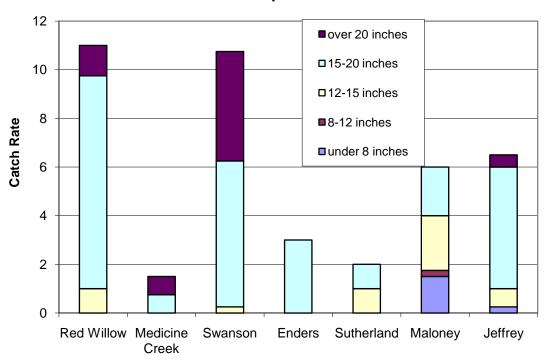
While the numbers of M.A. awards given may not necessarily represent the true number of large fish caught (but not reported), the information is useful for evaluating catch trends. No one species of fish has dominated the Master Angler (M.A.) awards from Jeffrey, but wipers, largemouth bass, walleye, channel catfish, and white bass have made up the majority. Species in the "others" category include bigmouth and smallmouth buffalo, freshwater drum, flathead catfish, northern pike, black crappie, bluegill, and common carp. One channel catfish, one northern pike and three wipers were reported in 2008.

The following graphs compare 2009 walleye, white bass, wiper and channel catfish gill net catch rates between Southwest District reservoirs.

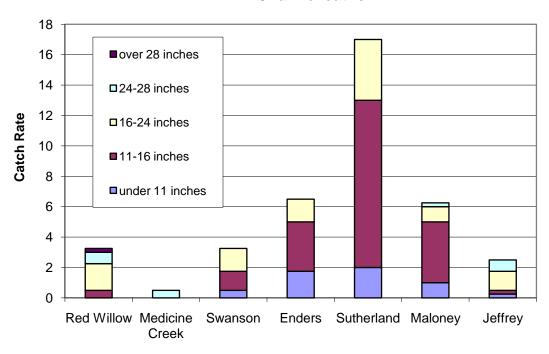




Wiper



Channel catfish



For additional information on fisheries management at Enders Reservoir contact: Darrol Eichner, District Mgr. 308-284-8803, darrol.eichner@Nebraska.gov Caleb Huber, Biologist 308-535-8025, caleb.huber@Nebraska.gov Jared Lorensen, Biologist 308-535-8025, jared.lorensen@Nebraska.gov Mark Staab, Cons. Tech. 308-535-8025, mark.staab@Nebraska.gov